

Notice of Allowability

Application No.	Applicant(s)	
09/963,332	SEPPALA ET AL.	
Examiner	Art Unit	
Dmitry Levitan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 5/30/06.
2. The allowed claim(s) is/are 1, 2, 5-7, 9-12, 15-17, 19-25 and 27-29, renumbered as 1-4, 7-9, 11, 12, 14-16, 20, 21, 5, 10, 17, 22, 13, 18, 6, 19.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other Attachment A.

Amendment, filed 5/30/06 has been entered.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Geza C. Ziegler on 06/15/06.

The application has been amended as follows:

Claims have been amended per Attachment A.

Note. Claim 13 and the dependent claims 14 and 26 have been cancelled because they were reading on Perkins in view of Feder. Other claims were amended for clarity.

Allowable Subject Matter

2. Claims 1, 2, 5-7, 9-12, 15-17, 19-25 and 27-29 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dmitry Levitan
Examiner
Art Unit 2616

Attachment A.

1. (Currently Amended) A method of using mobility agents in a telecommunications system, which telecommunications system comprises at least one mobile node supporting the mobile IP and several network elements, of which network elements at least one comprises one or more mobility agents configured to transmit advertising messages to mobile nodes, the method comprising:

establishing a data transmission connection between a mobility agent and one or more network elements in the system to collect attribute information,

transmitting to the mobility agent information on attributes of one or more network elements from the connected one or more network elements,

transmitting said information on the attributes in advertising messages from the mobility agent to at least one mobile node, and

using said information in the mobile node in the selection of a serving network element.

2. (Currently Amended) A method according to claim 1, wherein:

said information is transmitted in advertising messages including care-of addresses of the mobility agents periodically, at the request of a mobile node, or periodically and at the request of a mobile node.

3-4. (Cancelled)

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5. (Currently Amended) A method according to claim 1, wherein the mobile node is wireless and the telecommunications system is wireless and comprises access points which offer a wireless connection to at least one mobile node, said information comprising at least one of the following:

loads of different access points,

information on ~~the~~ least loaded access point,

information on ~~the~~ recommended access point, and

other quality of service parameters of the access points.

6. (Currently Amended) A method according to claim 5, wherein:

~~the attributes of different access points that offer a wireless connection to the at least one mobile node are compared in the mobile node on the basis of said information,~~

~~an~~ the access point that, on the basis of its attributes and any other criteria, can offer a telecommunications connection to the mobile node is selected, and

a connection is established between the selected access point and the mobile node.

7. (Previously Presented) A method of utilizing advertising messages in a telecommunications system, which telecommunications system comprises at least one

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mobile node and at least one router, the router being configured to transmit advertising messages to mobile nodes, the method comprising:

establishing a connection between at least one router and at least one network element to collect attribute information,

transmitting to the router information on attributes of one or more network elements from the connected network element,

transmitting advertising messages from the router to at least one mobile node, the messages including said information on the attributes of one or more network elements, and

using said information in the mobile node in selection of a serving network element.

8. (Cancelled)

9. (Currently Amended) A method according to claim 7, wherein the at least one mobile node is wireless and the telecommunications system is wireless and comprises access points which offer a wireless connection to the at least one mobile node, said information on attributes of one or more network elements comprising at least one of the following:

loads of different access points,

information on the least loaded access point,

information on the recommended access point, and

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other quality of service parameters of the access points.

10. (Currently Amended) A method according to claim 9, wherein

the attributes of different access points which offer a wireless connection to the at least one mobile node are compared in the mobile node on the basis of said information,

the an access point that, on the basis of its attributes and any other criteria, can offer a telecommunications connection to the mobile node, is selected, and

a connection between the selected access point and the mobile node is established.

11. (Currently Amended) A network element of a telecommunications system, the network element comprising:

an IP mobility agent, wherein the network element is configured to connect an other network element to collect attribute information,

the IP mobility agent is configured to receive information on attributes of one or more network elements from the other network element separate from the network element comprising the IP mobility agent, and

the IP mobility agent is configured to transmit the information on attributes of one or more other network elements in advertising messages to at least one mobile node.

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12. (Currently Amended) A network element according to claim 11, wherein the information on attributes of one or more network elements transmitted in advertising messages further comprises attributes of one or more access points of the telecommunications system.

13-14. (Cancelled)

15. (Currently Amended) A mobile node supporting the mobile IP for a telecommunications system, which telecommunications system comprises several network elements, of which at least one comprises one or more mobility agents, said mobile node comprising:

reception means for receiving in advertising messages attribute information on one or more network elements from at least one mobility agent, said information being received by the at least one or more mobility agents from another network element separate from the network element comprising the at least one or more mobility agents and connected to collect the attribute information received in advertising messages, and

processing means for selecting a serving network element on the basis of said attribute information received in advertising messages.

16. (Currently Amended) A mobile node according to claim 15, wherein:

the processing means are configured to compare attributes of the foreign agents of the basis of said attribute information received in advertising messages,

the processing means are configured to select a foreign agent that on the basis of its attributes can take care of data transmission of the mobile node, and

the processing means are configured to transmit a registration request to the selected foreign agent.

17. (Currently Amended) A mobile node according to claim 15, wherein:

said attribute information in advertising messages comprise attributes of the access points of the telecommunications system,

the processing means are configured to compare the attributes of the access points on the basis of said attribute information received from the mobility agents,

the processing means are configured to select the access point that, on the basis of its attributes and any other criteria, can offer a telecommunication connection to the mobile node, and

the processing means are configured to establish a connection between the selected access point and the mobile node.

18. (Cancelled)

19. (Currently Amended) A mobile node for a telecommunications system, which telecommunications system comprises one or more routers configured to transmit advertising messages having attribute information, said mobile node comprising:

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reception means for receiving the attribute information on one or more network elements from at least one router, said attribute information being received by the at least one router from another network element separate from the network element comprising the at least one router and connected to collect the attribute information, and

processing means for selecting a serving network element on the basis of said attribute information.

20. (Currently Amended) A mobile node according to claim 19, wherein said attribute information in advertising messages comprises attributes of the access points of the telecommunications system,

the processing means are configured to compare the attributes of the access points on the basis of said attribute information,

the processing means are configured to select an access point that, on the basis of its attributes and any other criteria, can offer a telecommunication connection to the mobile node, and

the processing means are configured to establish a connection between the selected access point and the mobile node.

21. (Previously Presented) A method according to claim 6, wherein said other criteria comprises radio channel measurements.

22. (Previously Presented) A method according to claim 10, wherein said other criteria comprise radio channel measurements.

23. (Previously Presented) A mobile node according to claim 17, wherein said other criteria comprise radio channel measurements.

24. (Previously Presented) A mobile node according to claim 20, wherein said other criteria comprises radio channel measurements.

25. (Currently Amended) A network element according to claim 11, wherein the IP mobility agent is configured to request attribute information from the other network element.

26. (Currently Amended) A router according to claim 13, wherein the router is configured to request attribute information from the one network element. (Cancelled)

27. (Currently Amended) A mobile node according to claim 15, wherein

 said attribute information comprises at least one of the following foreign agent attributes:

 current delay of the connection offered by the foreign agent,

 average delay of the connection offered by the foreign agent,

 jitter of the connection offered by the foreign agent,

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number of users served by the foreign agent, and

throughput of the foreign agent.

28. (Currently Amended) A method according to claim 1, wherein:

attributes of different foreign agents are compared in the mobile node on the basis of
said attribute information received by the mobile node from the foreign agents,

the a foreign agent is selected, that on the basis of its attributes, can take care of
data transmission of the mobile node ~~is selected~~, and

a registration request is transmitted to the selected foreign agent.

29. (Currently Amended) A method according to claim 27, wherein

said attribute information comprises at least one of the following foreign agent
attributes:

current delay of ~~thea~~ connection offered by the foreign agent,

average delay of the connection offered by the foreign agent,

jitter of the connection offered by the foreign agent,

number of users served by the foreign agent,

throughput of the foreign agent,

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load of the foreign agent, and

proportional load of the foreign agent compared to the other foreign agents in the system.

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